e.) comparing the peak-to-mean likelihood ratio to a selected threshold to determine whether a current audio frame represents a voice signal.

<div align="center">REMARKS</div>

This Amendment is in response to the Office Action mailed September 13, 2000. In the Office Action, the Examiner rejected claims 1-18 under 35 U.S.C. §103.

REJECTION UNDER 35 U.S.C. § 103

The Examiner rejects claims 1-4 and 7-18 under 35 U.S.C. §103 as being unpatentable over U.S. Patent No. 5,737,407 issued to Graumann in view of U.S. Patent No. 5,311,588 issued to Polcyn et al. (hereinafter "Polcyn") claim 5 under 35 U.S.C. §103 as being unpatentable over Graumann and Polcyn and further in view of U.S. Patent No. 5,657,422 issued to Janiszewski et al (hereinafter "Janiszewski") and claim 6 under 35 U.S.C. §103 as being unpatentable over Graumann and Polcyn and further in view of U.S. Patent No. 5,664,052 issued to Nishiguchi et al (hereinafter "Nishiguchi"). Applicant respectfully submits that a prima facie case of obviousness has not been met in light of the remarks set forth herein.

Regarding claim 1, the Office Action explicitly states that Graumann does not specifically disclose the determination of a peak-to-mean likelihood ratio. Rather, it is alleged that the peak-to-mean power ratios described in the Abstract, at col. 1, lines 59-66 continuing to col. 2, lines 1-33, col. 7, lines 49-67 continuing to col. 8, lines 1-25, col. 16, lines 20-37, and col. 16, lines 49-62 (claim 1) of Polcyn suggest the claimed peak-to-mean likelihood ratio limitation. Applicant disagrees with the rejection.

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Polcyn describes:

a peak to average ratio (Abstract line 4; column 1, line 61; column 2, line 16, 17 and 28; column 7, lines 49-67 continuing to column 8, lines 1-25);

a PEAK/MAX ratio (column 2, line 24);

a peak average (column 7, lines 58 to 67 continuing to column 8, lines 1-25) defined as:

$$PAR = \frac{(V_{max})^2}{\sum_{1}^{N}(V_i)^2 / N}$$

(see column 5, lines 25-30);

a total average power (column8, line 15); and

an average power (column 8, line 16)

As to the reference to col. 16, lines 49-67 (claim 1), it is respectfully asserted that it is impermissible to rely on the language in the claims as support for the teachings of Polcyn. In re Benno, 768 F2d 1340, 226 USPQ 683, 686 (Fed.Cir.1985).

Otherwise, Polcyn is silent regarding a peak-to-mean likelihood ratio (PMLR) defined as:

$$PMLR_k = \frac{(APMR_{max} - APMR_k)}{(APMR_{max} - APMR_{min})} \quad \text{(see application, page 16, line 11).}$$

In contrast, the claimed invention recites a peak-to-mean likelihood ratio, as recited in independent claim 1. Since neither Grauman and Polcyn, alone or in combination, teach or even suggest a peak-to-mean likelihood ratio, applicant respectfully requests that the §103 rejection of claim 1 and the claims dependent thereon, claims 2-4, be withdrawn.

Regarding the assertion that the particular equation used to calculate peak-to-average ratios is merely a design choice, applicant has claimed a peak-to-mean likelihood ratio in contrast

to a peak-to-average ratio. As set forth in the specification, the peak-to-mean likelihood ratio discourages in/out effects (see page 15, line 24 to page 16, line 2). Polcyn describes a system directed to determining whether or not a signal is machine repeatable and that recognizes dead air time-outs (see column 4, lines 25-30 and 55-56). Since Polcyn describes a dead air time-out while remaining silent regarding discouraging in/out effects, discouraging in/out effects is an unexpected result of the peak-to-mean likelihood ratio. Accordingly, a peak-to-mean likelihood ratio is not a mere design choice.

For reasons similar to those set forth above, applicant respectfully requests that the §103 rejection of independent claims 7 and 13 and the claims dependent thereon, claims 8-12 and 14-18, be withdrawn.

Regarding claim 5, as set forth above, neither Grauman nor Polcyn, teach a peak-to-mean likelihood ratio. Janiszewski teaches a noise estimate (see column 5, lines 20-25). Otherwise, Janiszewski is silent regarding a peak-to-mean likelihood ratio. In contrast, the claimed invention incorporates by reference a peak-to-mean likelihood ratio in claim 5. Since neither Grauman, Polcyn nor Janiszewski, alone or in combination, teach or even suggest a peak-to-mean likelihood ratio, applicant respectfully requests that the §103 rejection of claim 5 be withdrawn.

Regarding claim 6, As set forth above, neither Grauman nor Polcyn, teach a peak-to-mean likelihood ratio. The Examiner asserts that Nishiguchi discloses a normalized peak ratio. Nishiguchi describes a peak value, a mean peak value and a peak value bias data (see column 7, lines 31-67 and column 8, lines 1-32.) Otherwise, Nishiguchi is silent regarding a peak-to-mean likelihood ratio. In contrast, the claimed invention incorporates by reference a peak-to-mean likelihood ratio in claim 6.

Since neither <u>Grauman</u>, <u>Polcyn</u> nor <u>Nishiguchi</u>, alone nor in combination, teach or even suggest a peak-to-mean likelihood ratio, applicant respectfully requests that the §103 rejection of claim 6 be withdrawn.

REQUEST FOR WITHDRAWAL OF FINALITY OF REJECTION

In light of the failure of <u>Grauman</u>, <u>Polcyn</u>, <u>Janiszewski</u> and <u>Nishiguchi's</u> to teach or even suggest a peak-to-mean likelihood ratio, applicant respectfully submits that the finality of the rejection is premature. Therefore, applicant respectfully requests that the finality of the rejection be withdrawn and that the above-entitled application be reconsidered.
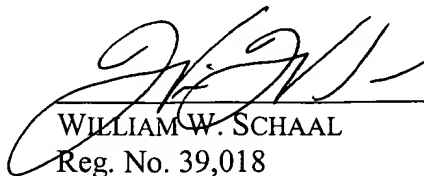
CONCLUSION

In view of the amendments and remarks made above, it is respectfully submitted that all pending claims are in condition for allowance, and such action is respectfully solicited. It is respectfully requested that the Examiner contact the undersigned attorney in order to facilitate prosecution of the subject application.

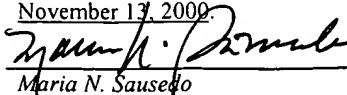Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: <u>November 13, 2000</u>

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